

Solar power's bright future in Japan

Land of the rising subsidy

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Japanese makers of solar panels are well placed to endure the present glut

UNTIL five years ago Japan made around half of the world's solar cells, thanks to its thirst for native energy and its expertise in the related fields of computer chips and flat screens for televisions. Sharp, which alone has made a quarter of all the solar cells ever produced, dominated the industry. But as solar technology matured and demand grew, new companies emerged, notably in China and Taiwan, eroding Japanese firms' share of the market to around 20%. Sharp slipped to fourth place among manufacturers in 2008, after Q-Cells of Germany, First Solar of America and Suntech of China.

Factories have mushroomed all over the world in recent years, on the assumption that subsidies and loans for solar power would continue to grow, along with the world economy. Chinese manufacturers' share grew sixfold from 2004 to 2008, capturing more than one-third of the global market. This prompted fears that Japan's strength in solar would go the way of computer chips and television screens, in which Japanese firms have lost their dominance over rivals from elsewhere in Asia.

To avoid this fate, Japanese firms have concentrated on improving their technology and adjusting their business models. They have the most sophisticated kit, respected brands and healthy balance-sheets, notes Travis Bradford, president of the Prometheus Institute, a solar advocacy group. All this should spare them the worst amid the present solar glut. The entire industry's sales are expected to be below

7,000 megawatts this year. That is roughly half of its capacity. The economic crisis has led to the cancellation of many big projects, and subsidies for solar power in Germany and Spain are being reduced.

Excess supply has forced the prices of solar panels down by more than 40% this year. In Asia factories that recently cropped up are running at 40% of capacity, with a huge shakeout expected, explains Joe Boyce of Gaia Consulting. But Japanese makers are protected because they can manufacture cells less expensively than European firms and have better technology than Chinese ones. They are also sheltered in their home market, where customers prefer domestic products.

Additionally, Japanese companies are following some American and European rivals into electricity generation. Sharp, for example, is negotiating a deal with Enel, Italy's biggest power company, under which it will build solar panels for use in Enel's solar-power plants. Enel will help to finance the panel factory and Sharp will take a stake in the plants. In March Mitsubishi, a large trading company, acquired 34% of Amper Central Solar, a power plant in Portugal. Showa Shell, an oil distributor and panel-maker, plans to enter the generation business with Saudi Aramco, Saudi Arabia's state-owned oil giant.

Many Japanese solar firms are in fact expanding. The country's four biggest—Sharp, Kyocera, Sanyo and Mitsubishi Electric—are investing billions of dollars to double their production, at least, over the next three years. They expect an increase in demand owing to growing subsidies for renewable energy in America and Japan. The Japanese government reintroduced generous handouts for solar power this year. These had stopped in 2006, when it had seemed that the market could support itself. Between April and June domestic sales increased by 80% in volume, while sales elsewhere slumped. Goldman Sachs



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